REMARKS/ARGUMENTS

1.) Claim Amendments

The Applicant has amended claims 1, 12, 23 and 24. Claim 25 has been added. Accordingly, claims 1 to 25 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

In claims 1, 12, 23, and 24 the word "simultaneous" has been added to address any confusion which may exist regarding the terminology. However, these modifications should be implicit given that all these claims are limited to networks employing macro-diversity. Consequently, these modifications do not raise issues that would require a new search or substantial consideration by the Examiner.

U.S. practice. Consequently, this addition does not raise issues that would require a new search or substantial consideration by the Examiner. The Examiner's consideration of the new claim is respectfully requested.

2.) Claim Rejections - 35 U.S.C. § 102(e)

The Examiner rejected claims 1-3, 5-7, 11-14, 16-18 and 22 under 35 U.S.C. § 102(e) as being anticipated by Ishikawa, et al. (US 5,640,678). The Applicant respectfully traverses this rejection.

To illustrate the Applicant's traversal, claim 1 is reproduced below:

1. A mobile cellular telecommunications network <u>employing</u> macro-diversity,

wherein a mobile station <u>can establish a plurality of simultaneous</u> radio links with cells in the network,

wherein the cells of the network are considered in groups, and wherein, when determining whether to establish a new radio link between a mobile station and a new cell, the network applies a quality criterion to the new link, which depends on whether the new cell belongs to any group with which the mobile station does not already have a link.

The Applicant believes there may be some confusion with terminology. The Applicant does not believe that term "radio links" as interpreted by the Office Action

Amendment - PAGE 9 of 15 EUS/J/P/04-8654

refers to radio links as used and defined in the Applicant's Specification. The Applicant wishes to direct the Examiner's attention to the present Specification at page 6, lines 10-14 where the term radio link is defined:

A mobile station typically has simultaneous connections (radio links) to a number of cells. These cells are called the "active set". Typically, an active set can contain a maximum of four cells.

Thus, as used in the present Application, the term "radio link" refers to a "connection." In other words, as used and defined in the Applicant's Specification, the term "radio link" refers to more than just the receiving of radio signal, but an established connection between the mobile unit and the base stations.

The present Application also defines the term "macro-diversity" to mean "that at any given time, a mobile may have radio links to more than one cell." See the Applicant's Specification, page 2, lines 29-31. Thus, macro-diversity means that a mobile unit may have more than one connection at a time. An example, would be CDMA systems which allow multiple connections between a mobile unit and the respective base stations.

It is well established that the inventor can be his own lexicographer. As the MPEP states in section 2106(II)(C):

Office personnel must rely on the applicant's disclosure to properly determine the meaning of terms used in the claims. Markman v. Westview Instruments, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (en banc), aff 'd, U.S., 116 S. Ct. 1384 (1996). An applicant is entitled to be his or her own lexicographer, and in many instances will provide an explicit definition for certain terms used in the claims. Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings."). Office personnel should determine if the original disclosure provides a definition consistent with any assertions made by applicant. See, e.g., In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (inventor may define specific terms used to describe invention, but must do so "with reasonable clarity, deliberateness, and precision" and, if done, must " 'set out his uncommon definition in some manner within the patent disclosure' so as to give one of ordinary skill in the art notice of the change" in meaning) (quoting Intellicall, Inc. v.

Phonometrics, Inc., 952 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992)).

Thus, according to the MPEP, the Examiner should use the definitions provided in the Applicant's Specification.

Ishikawa discloses a mobile communication system which precludes the necessity for mobile station to perform processing for microcell zone switching even when it moves from one microcell zone to another. The mobile stations described in Ishikawa, however, do not allow a mobile station to establish a plurality of "radio links" with cells in a network (assuming that the Applicant's definition of "radio link" is used). The Examiner's citation is reproduced below:

FIG. 7 illustrates an embodiment of a macrocell base station antenna maximum ratio combined site diversity transmission and reception system. In FIG. 7, the transmission signal from the mobile station 8 is received by all the microcell base station antennas 31 through 36 in the macrocell. Ishikawa, col. 10, lines 14-17.

Clearly, the fact that a single transmission can be received by more than one antenna is not the same as being able to establish a simultaneous plurality of radio links or connections as specified in claim 1. In fact, nothing in Ishikawa discloses the ability of a mobile station to actually establish a plurality of "radio links" or connections as defined in the Applicant's specification.

Furthermore, claim 1 claims a network employing "macrodiversity" which, as defined in the Specification, is "that at any given time, a mobile may have radio links to more than one cell." This limitation is not the same as the invention disclosed in Ishikawa, which does not indicate the capability to establish a plurality of simultaneous radio connections with the mobile unit.

Finally, claim 1 also contains the following element:

wherein, when determining whether to establish a new radio link between a mobile station and a new cell, the network applies a quality criterion to the new link, which depends on whether the new cell belongs to any group with which the mobile station does not already have a link.

DAGE

Attorney Docket No. P12044

In the Office Action, the Examiner apparently equates the limitation "which depends on whether the new cell belongs to any group" with the phrase "where the transmission signal is measured by the group/macrocell level comparater." See the Office Action, page 3, first paragraph. The Applicant is somewhat puzzled by this statement. In any case, if the Examiner is equating these phrases, the Applicant strongly disagrees with this characterization. Nothing in Ishikawa discloses or teaches the element of "determining whether to establish a new radio link between a mobile station and a new cell, the network applies a quality criterion to the new link, which depends on whether the new cell belongs to any group with which the mobile station does not already have a link.

Thus, it is respectfully submitted that all the elements of claim 1 are not taught by Ishikawa. Because all elements of claim 1 are not taught by Ishikawa, a 102 rejection is not proper. The Examiner's reconsideration of claim 1 is respectfully requested.

Claims 2-11 depend from claim 1 and recite further limitations in combination with the novel elements of claim 1. Therefore, the allowance of claims 2-11 is respectfully requested.

Claim 12 contains elements and limitations similar to claim 1. Therefore, claim 12 is allowable for the same reasons that claim 1 is allowable. Claims 13-22 depend from claim 12 and recite further limitations in combination with the novel elements of claim 12. Therefore, the allowance of claims 13-22 is also respectfully requested.

3.) Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claims 4 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Achour, et al. (US 01/03464). The Examiner rejected claims 8-10 and 19-21 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Rinne, et al. (US 6,574,473). The Applicant respectfully traverses these rejections.

Achour is directed to a technique for increasing the performance of a wireless communication device near the edge of coverage when another wireless communication system is available. Although Anchor does appear to teach some

elements of claim 4 and 15, the combination of Ishikawa and Anchor do not teach all of the elements of the claims.

Rinne is directed to handover techniques where a connection is assigned a radio network controller (i.e., an anchor controller) through which the user data are directed also when some other radio network controller is the active radio network controller. If during a connection a base station connected to another radio network controller is chosen the active base station, the user data are directed such that they travel to the active radio network controller via the anchor controller.

Specifically, as previously discussed, the combination of references do not teach the element of "determining whether to establish a new radio link between a mobile station and a new cell, the network applies a quality criterion to the new link, which depends on whether the new cell belongs to any group with which the mobile station does not already have a link.

As provided in MPEP § 2143, "[t]o establish a prima facie case of obviousness, ... the prior art reference (or references when combined) must teach or suggest <u>all</u> the claim limitations." Furthermore, under MPEP § 2142, "[i]f the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." It is submitted that the Office Action does not factually support a prima facie case of obviousness for claims 4 and 15 based on the combination of Ishikawa and Anchor.

The Examiner also rejected claims 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Rinne, further in view of Achour. The Applicant respectfully traverses this rejection.

Claim 23 states:

23. A mobile cellular telecommunications network using macrodiversity,

wherein a mobile station can establish a plurality of radio links with cells in the network, the cells with which the mobile station has established radio links being defined as an active set,

wherein the cells of the network are considered in groups, and wherein the network determines whether to establish a new radio link between a mobile station and a new cell, by determining whether a quality value of the new radio link exceeds a threshold set at a difference level below a best cell in the active set, the size of the difference level

Amendment - PAGE 13 of 15 EUS/J/P/04-8654

depending on whether the new cell belongs to any group to which no member of the active set belongs.

The Applicant has searched the cited references, but could not locate where the element of "determining whether a quality value of the new radio link exceeds a threshold set at a difference level below a best cell in the active set, the size of the difference level depending on whether the new cell belongs to any group to which no member of the active set belongs" is taught by the cited references. Because all elements are not taught by the combination of the cited references, it is respectfully submitted that the Office Action does not factually support a prima facie case of obviousness for claim 23 based on the combination of Ishikawa, Anchor and Rinne.

Claim 24 contains elements and limitations similar to claim 23. Therefore, claim 24 is allowable for the same reasons that claim 23 is allowable.

New claim 25 contains similar limitations, but new claim 25 is presented in a format that is customary to U.S. practice.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

Bill R. Naifeh

Registration No. 44,962

Date: 🗂

Ericsson Inc.

6300 Legacy Drive, M/S EVR1 C-11

Plano, Texas 75024

(972) 583-2012

bill.xb.naifeh@ericsson.com